

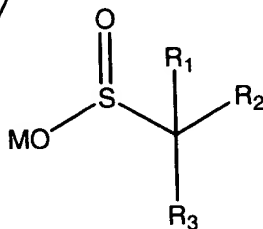
IN THE CLAIMS

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1. (Amended) In a vinyl acetate based polymer formed by the emulsion polymerization of vinyl acetate and N-methylolacrylamide, optionally other monomers, in the presence of a stabilizing system and a redox catalyst system comprised of an oxidizing agent and a reducing agent, the improvement for reducing formaldehyde emissions in the resulting emulsion, which comprises:

A3

forming said vinyl acetate based polymer utilizing as the reducing component of the redox catalyst system a reducing agent of the formula:



where M is a hydrogen atom, an ammonium atom or a monovalent metal ion, R₁ is OH or NR₄R₅ wherein R₄ and R₅ each are H or C₁-C₆ alkyl; R₂ is H or an alkyl, alkenyl, cycloalkyl or aryl and R₃ is CO₂M.

2. (Amended) The vinyl acetate based polymer of Claim 1 in which the vinyl acetate based polymer comprises ethylene in an amount of from about 10 to 40% by weight of the polymer.

3. (Amended) The vinyl acetate based polymer of Claim 2 wherein the N-methylolacrylamide is present in an amount of from about 0.5 to 10% by weight of the polymer.

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4. (Amended) The vinyl acetate based polymer of Claim 3 wherein the reducing agent represented by the formula is selected from the group consisting of: 2-hydroxyphenyl hydroxymethyl sulfinic acid-sodium salt; 4-methoxyphenyl hydroxymethyl sulfinic acid-sodium salt; 2-hydroxy-2-sulfinato acetic acid-disodium salt; 2-hydroxy-2-sulfinato acetic acid-zinc salt; 2-hydroxy-2-sulfinato propionic acid-disodium salt; and ethyl 2-hydroxy-2-sulfinato propionate-sodium salt.

5. (Amended) The vinyl acetate based polymer of Claim 4 wherein the vinyl acetate based polymer is formed using a redox catalyst system of hydrophobic hydroperoxide and the glycolic acid adduct of sodium sulfite.

6. (Amended) The vinyl acetate based polymer of Claim 3 wherein M is sodium or zinc.

7. (Amended) The vinyl acetate based polymer of Claim 3 wherein R₁ is OH.

REMARKS

Reconsideration of the above-referenced application is requested. Claims 1-7 are pending in the case.

Amendments were made to the specification, at page 7, lines 22-23, and page 8, lines 20-21, to correct errors with respect to the name the reducing agent employed. The trademark for the reducing agent was employed in Examples 1 and 2. The proper name was noted at page 3, line 10.

Rejection Under 35 U.S.C. §112, 2d paragraph

In paragraph 2 of the Office Action, Claims 1-7 were rejected under 35 U.S.C. §112, 2d paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as their invention.